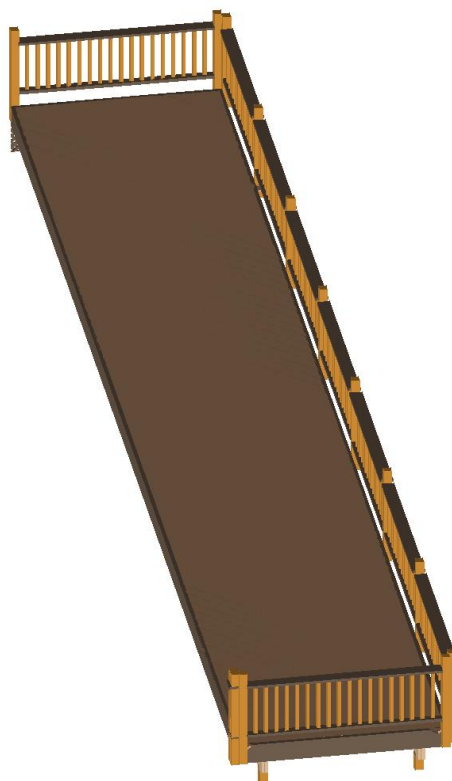




NEVER STOP
IMPROVING.

DECK DESIGNER

powered by  **DIY Technologies**



Lowe's Deck Design

Brenda`s Deck

Print this document and take it to the Doors and Windows desk or Commercial Sales desk
at your local Lowe's store.

One of our associates will help you find the materials you need.

Your Deck Design's Project ID is:

527700657

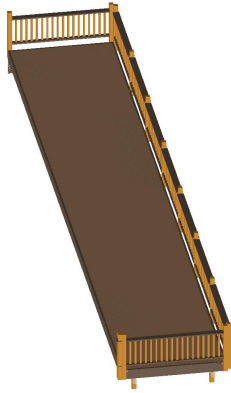
Created on Jun-29-2013

All rights reserved copyright ©2013 DIY Technologies

Project ID: 527700657

Store# 0595

Deck layout diagram



Top view without planks

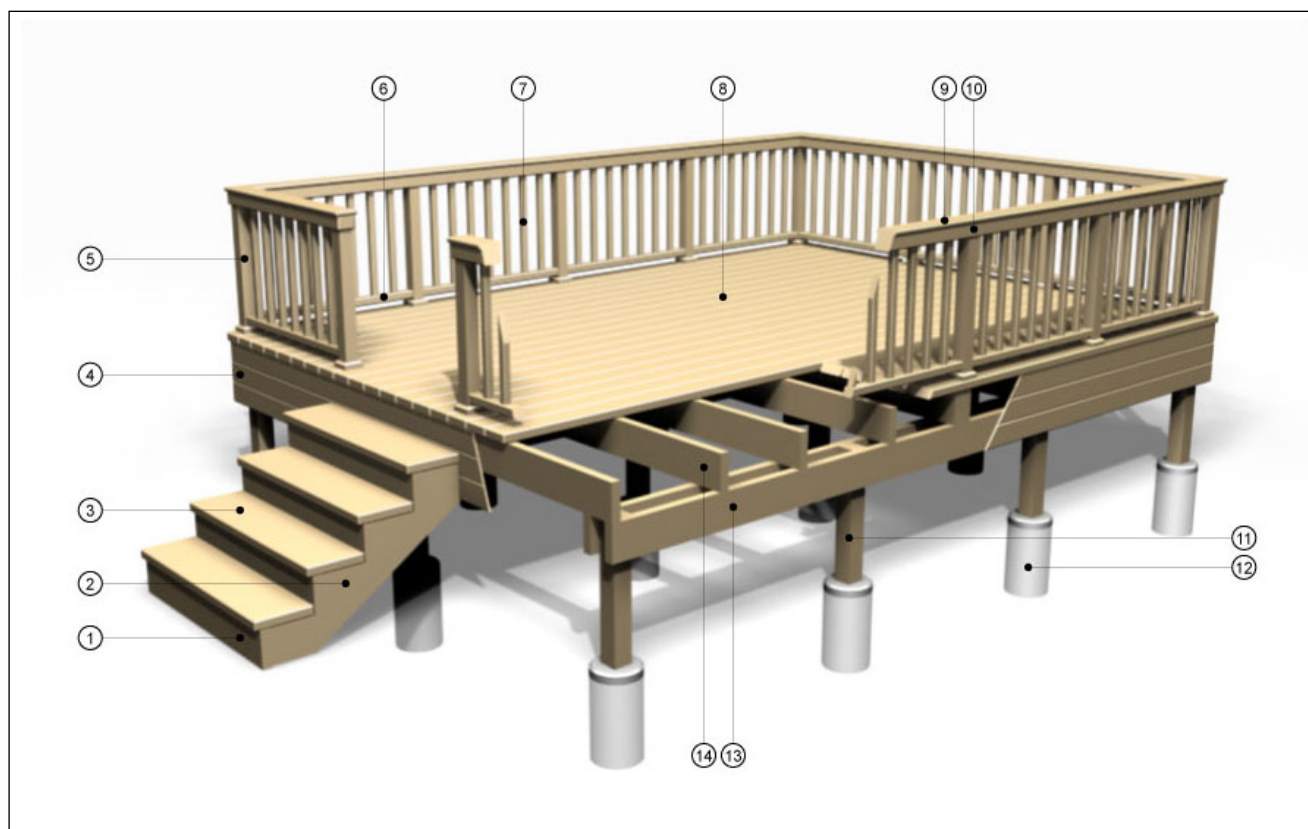


Bottom view with planks



Top view with planks

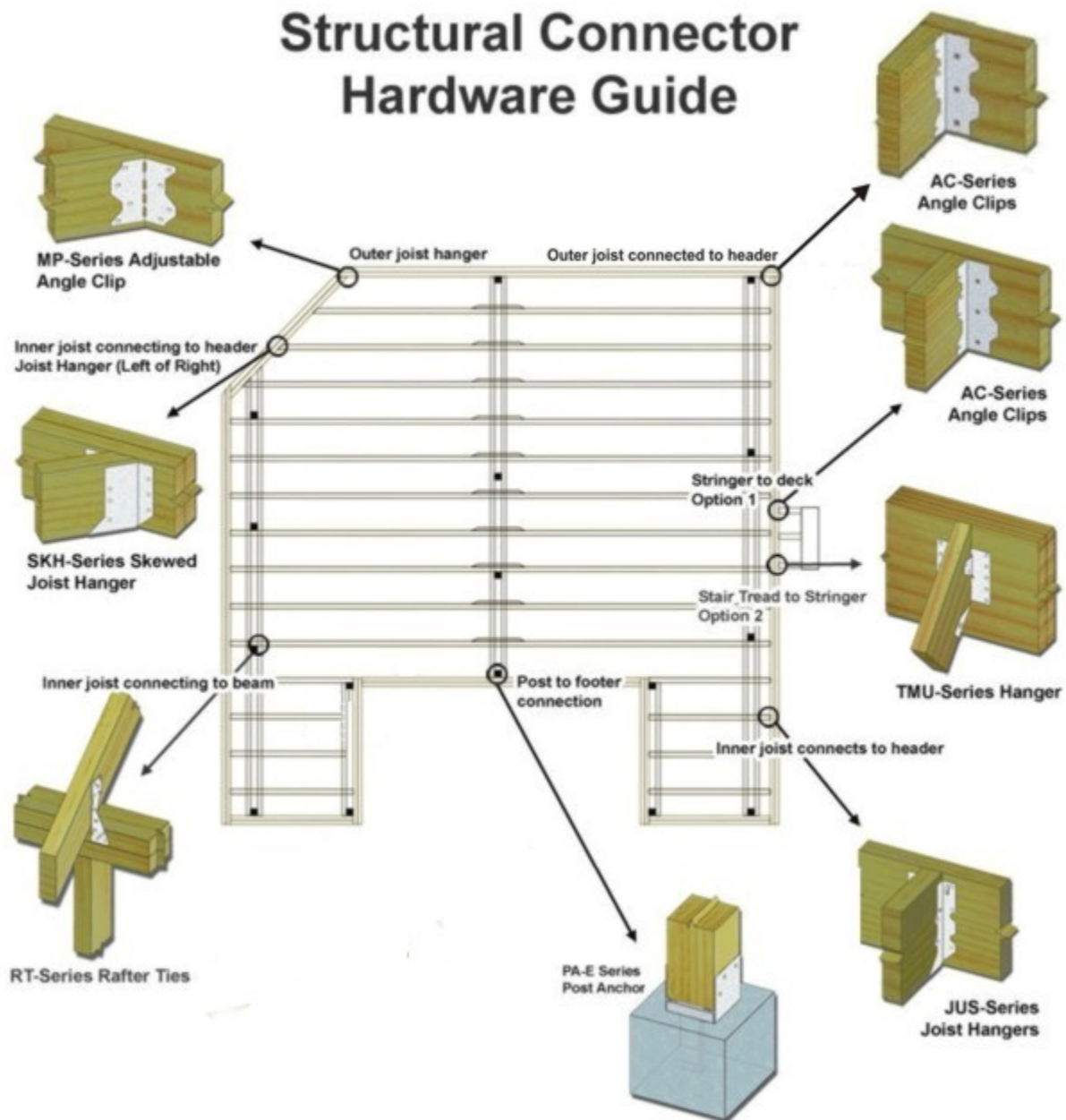
Deck Part Identification



1. Riser	6. Bottom Rail	11. Post	Major Deck Components NOTE: Not to scale ©2013 DIY Technologies
2. Stringer	7. Baluster	12. Post Footer	
3. Tread	8. Decking	13. Beam	
4. Fascia	9. Rail Cap	14. Joist	
5. Rail Post	10. Top Rail		

Baluster	The vertical pieces of a railing spaced at regular intervals between posts.
Beam	A horizontal framing piece, which rests on posts and supports joists.
Decking	The boards used to make the walking surface of the deck.
Joist	A horizontal frame piece that supports the decking and spreads the weight over the beams.
Ledger	A horizontal strip that connects the deck to the house.
Post Footer	Concrete filled hole that the post is attached to.
Post	A vertical framing piece, used to support a beam or joist.
Riser	A board attached to the vertical cut surface of a stair stringer.
Stringer	The diagonal board used to support treads and risers on a stairway.
Tread	The horizontal surface of a stair.
Bottom Rail	The lower horizontal piece that connects rail posts and supports balusters.
Top Rail	The upper horizontal piece that connects rail posts and supports balusters.
Rail Cap	The top horizontal trim on railing.
Rail Post	The vertical post connected to the deck framing that supports the railing.

Structural Connector Hardware Guide



INSTALLATION CHECKLIST

General legal requirements

Check title restrictions and easements, building codes and zoning by-laws to make sure your deck design complies.

Obtain any required permits or zoning variances.

Check with local utility companies to make sure deck footings and construction will not disturb or obstruct access to piping or wiring.

Deck function

While planning your deck, determine how it will be used.

Your climate

While planning your deck, consider local weather.

Take advantage of good views.

Install ledger

Install ledger to anchor deck to house.

Ledger placement determines the deck floor level, normally 2-4" below floor line.

If unsure about attaching a ledger board, consult a professional.

Use batterboards and mason's string to mark off deck area and locate footing.

Square with string

Attach string to ledger and/or batterboards.

Batterboards go just outside perimeter corners of the deck.

Use the 3-4-5 method to get a 90 degree angle in one corner.

Footing requirements

Footing/posthole depth and location is dictated by local codes and by-laws.

INSTALLATION CHECKLIST

Attach beams to posts

Determine the desired deck floor height on the posts.

Determine height for securing the top of the beam to the post.

Attach joists

Joists are attached to ledger board with joist hangers or by toenailing.

Determine where blocking will go and snap a chalk line, but make sure to stagger pieces for ease of nailing.

Lay decking

Attach boards "bark side up" to minimize cupping and warping.

The deck boards can be trimmed after they are installed.

Railings

Railings must be firmly attached to the framing members of the deck.

Check local codes and by-laws for requirements on railings.

Stairs

Check local codes and by-law requirements on stairs.

Measure the rise and run of the stairs.

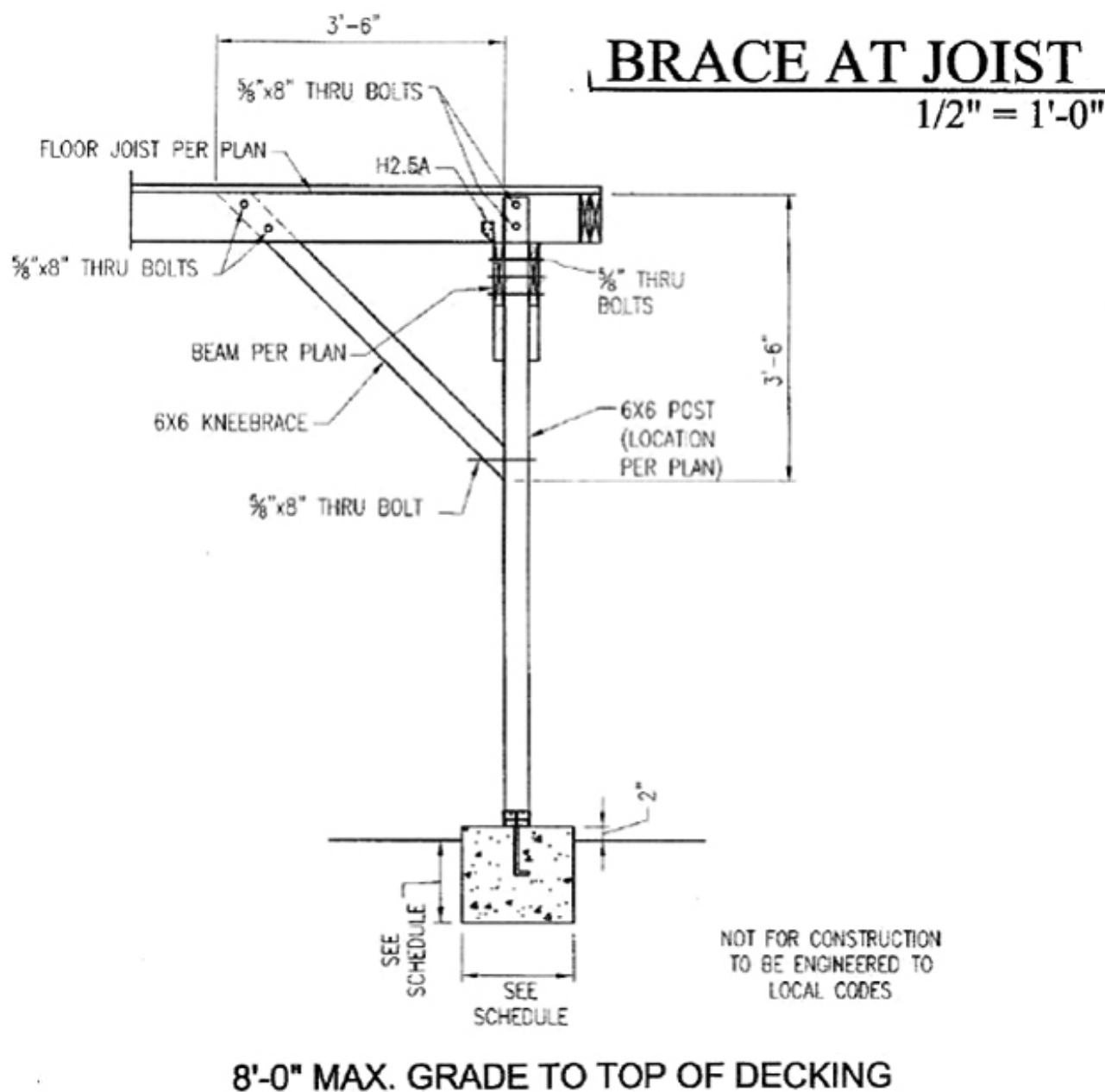
Multi-level decks

When planning a multi-level deck, for aesthetics make one deck larger than the other.

INSTALLATION CHECKLIST

Post bracing

Brace posts as dictated by local codes and by-laws.



Tools Required & Tips for Success

Tools Required:

Carpenter's level	Hearing protection	Ruler
Carpenter's square	Hammer	Safety glasses
Chalk line	Hand saw	Screwdrivers
Chisel	Hoe and hose (to mix concrete)	Shims or spacers
Circular saw	Ladder	Shovel
Claw hammer	Line	Socket wrench
Combination square	Mallet	Stakes or batter boards
Crescent wrench	Nail set	String
Drills and bits	Pencils	Tamper
Dust mask	Pick	Tape measure
Extension cord	Plumb bob	Transit
Framing square	Post hole digger	Tool belt
Gloves	Rafter square	Two foot level

Tips for success:

1. When cutting or drilling wood, always wear eye protection to prevent injury from flying wood particles
2. When cutting lumber, a fabric breathing mask will help to avoid ingestion of the dust. Wear gloves as the surface is rough and can cause splinters.
3. For outdoor projects, nails and other hardware should be hot-dipped zinc-coated or equally well-protected material to keep them from rusting.
4. To help prevent splitting, drill pilot holes in each piece of lumber before nailing or screwing.
5. Make sure to treat your deck to prolong its lifespan.
6. Before you apply a finish on your deck, test for moisture by sprinkling the surface of a small area of the deck with water. If the droplets bead up, the wood is still wet. Wood that is dry enough for treatment will quickly soak up the water.
7. Deck finishes come in both water and oil based. While oil-based finishes penetrate deeper into the wood, water-based products are easier to clean up and are more forgiving in damp conditions.
8. When applying finish or cleaner to your deck, protect surrounding vegetation by wetting with a hose and covering with plastic.
9. Invest in a pair of kneepads if you are doing floor jobs or working on a deck.
10. Dispose of scraps in the regular trash or take to a landfill - never burn.

**Below are the Specifications And Materials
that you have selected for your deck.**

Overview	Number of Levels: 1	Footer Depth: 24"
	Total Square Feet: 400	Live Load: 58
		Dead Load: 10

Component	Size	Wood Type
Joists	2x8	Top Choice Treated
Beams	2x8	Top Choice Treated
Posts	4x4	Top Choice Treated
Decking	5/4x6	Pressure Treated
Railing		Pressure Treated
Bench		
Lattice		treated

FooterDepth	24"	Live Load	58 psf
		Dead Load	10 psf

Material List

Lumber Materials

Item Number	Quantity	Description	Usage
62636	1	PT LATTICE PRIVACY-PLUS 4X8	Lattice
92334	12	Top Choice 2 x 8 x 10 #2 Prime Pressure Treated Lumber	Beam
92781	8	Top Choice 2 x 8 x 12 #2 Prime Pressure Treated Lumber	Beam
456205	7	Top Choice 4 x 4 x 8 #2 Prime Pressure Treated Lumber	Railing Post
46905	9	Top Choice 2 x 4 x 8 #2 Prime Pressure Treated Lumber	Railing Section
7950	149	2-in x 2-in x 42-in Square Treated Deck Baluster	Baluster
21210	9	1 x 6 x 8 #2 Pressure Treated Lumber	Railing Section
201521	3	Top Choice 2 x 10 x 8 #2 Prime Pressure Treated Lumber	Cladding
201525	6	Top Choice 2 x 10 x 16 #2 Prime Pressure Treated Lumber	Cladding
201691	59	Top Choice 5/4 x 6 x 12 Premium Treated Decking	Decking
86573	12	5/4 x 6 X12 Standard Treated Decking	Decking
91658	52	Top Choice 2 x 8 x 8 #2 Prime Pressure Treated Lumber	Header
201519	6	Top Choice 2 x 8 x 16 #2 Prime Pressure Treated Lumber	Header
456205	2	Top Choice 4 x 4 x 8 #2 Prime Pressure Treated Lumber	Post

Other Materials

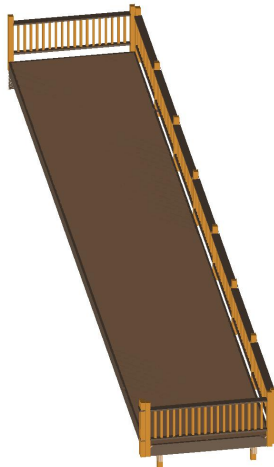
Item Number	Quantity	Description	Usage
116241	98	USP#JUS26-TZ 2x6-8" TRIPLE ZINC JOIST HANGER	Joist Framing
184955	4	USP 1 lb 9-Gauge 1-1/2-in Galvanized Smooth Joist Hanger	Joist Framing
69139	14	Grip-Rite 1 lb 9-Gauge 3-in Hot-Dipped Galvanized Smooth Nails	Joist Framing
37164	4	USP#AC7-TZ 7" TRIPLE ZINC ANGLE CLIP	Joist Framing
21993	102	USP#RT7A-TZ TRIPLE ZINC RAFTER TIE	Joist Framing
68408	4	JOIST HGR.NAIL 1 LB 1-1/2"NA111CD	Joist Framing
68408	1	1.5"1LB HDG STRCTURAL NAIL	Joist Framing
2411	12	USP 4-in x 4-in Steel G185 Post Base	Footing to Post
10385	13	QUIKRETE 80 lbs Setting Post Concrete Mix	Footing to Post
10149	6	QUIKRETE 8-in Concrete Forming Tube	Footing to Post
37161	24	USP 4-in x 6-in Steel G185 Post Cap	Post to Beam
67366	28	GALV LAG SCREW 1/2 X 8	Railing Post
63449	56	GALV ROUND WASHER 1/2"	Railing Post
41239	1	1/2" HEX NUT GALVANIZED (25) PP	Railing Post
63304	3	HEX NUTS 1/2 - 13	Railing Post
18284	2	2 1/2" DECK SCREW 5# -10YR(51854)	Deck Planking
17365	2	2 1/2"PG 1 LB DECK SCREW(61550)	Deck Planking

Total Item Number Count: 31

Your Custom Deck Estimate

Estimated materials cost with your custom selections:

\$2,582 - \$2,714



Your Custom Selections

Decking Type: Pressure Treated

Decking Size: 5/4x6

Decking Color:

Railing Material: Pressure Treated

Railing Style: Standard Railing with Bottom Rail

Railing Color:

Joist Spacing: 16"

Joist Wood Type: Top Choice Treated

Joist Size: 2x8

Beam Size: 2x8

Post Wood Type: Top Choice Treated

Post Size: 4x4

A detailed materials list, which includes the item numbers of products to purchase, can be found on page 10.

Estimated materials cost with basic selections: \$2,538 - \$2,669

Decking Type: Pressure Treated

Decking Size: 5/4x6

Railing Material: Pressure Treated

Railing Style: Pre-Assembled Railing

Joist Spacing: 16"

Joist Wood Type: Top Choice Treated

Joist Size: 2x8

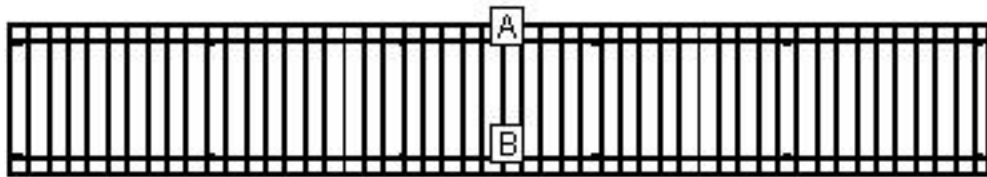
Beam Size: 2x8

Post Wood Type: Top Choice Treated

Post Size: 4x4

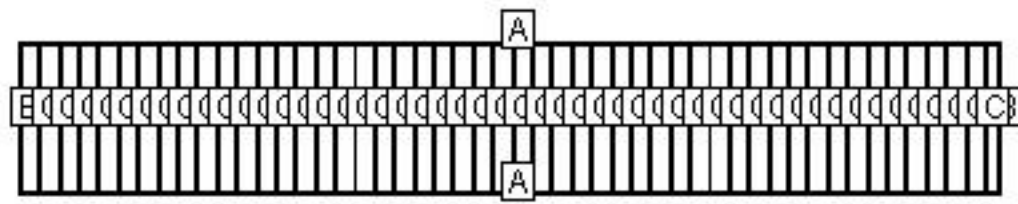
Note: Estimates are based on representative costs of materials in your geographic area.

Beam Layout Level 1



BEAM LABEL	BEAM LENGTH	POST COUNT	POST SPACING
A	49' 9"	6	9' 9"
B	49' 9"	6	9' 9"

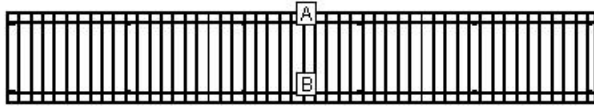
Materials Cut List: Level 1



LABEL	NAME	QTY	LENGTH	BEVELS	LABEL	NAME	QTY	LENGTH	BEVELS
A	Header	2	49' 6"		C	Internal Joist	49	7' 6"	
B	Rim Joist	2	7' 9"						

Cut Angles: L=Left, R=Right, F=Front, S=Side

Analysis Page: Level 1



LOAD AND SUPPORT:

Your deck will support a 58 PSF live load.
 Posts have 24" below ground support.

DECK AND POST HEIGHT:

You selected a height of 24" from the top of the decking to the ground level. The top of the deck support posts will therefore be 15" above ground level.

Joists:

Set joists on top of beams, 12"; center to center.

Stress Analysis: Level 1

Joist Deflection	1487
Joist Bending	302
Joist Shear	286
Joist Compression	286
Beam Deflection	106
Beam Bending	68
Beam Shear	81
Post Stability	192

Warning: This may not be a final design plan. Variations in building codes, specific architectural considerations, or site conditions may require changes to this design. You are responsible for the final structural, code verification, material usage, and structural safety of this design. Be sure to check and verify the design with your architect, engineer and building inspector.

Lowe's is a supplier of material only. Lowe's does not engage in the practice of engineering, architecture, or general contracting. Lowe's does not assume any responsibility for design, engineering, or construction; for the use of installation of materials; or for compliance with any building code or standard of workmanship. Always refer to information on fastener packaging for use with pressure treated lumber.

Preferences: Certain assumptions have been made in order to provide an accurate material quote for your Deck Project. Because local codes and by-law requirements may vary by municipality and province, it is imperative that you check with your local municipality for compliance with local requirements. The following building practice assumptions have been made in planning the materials for your project:

Footer Depth:	24"
Footer Type:	Post On Concrete
Joist Cantilever:	6 inches
Joist Spacing:	12" center to center
Spacing Between Deck Planking:	1/8"
Stair Stringers:	10 inches
Deck Live Load:	40 psf
Deck Dead Load:	10 psf
Stairs Live Load:	40 psf
Stairs Dead Load:	10 psf

Be sure to check and verify the design with your architect, engineer and building inspector.

Note: It is recommended that joist that meet on top of beams should be spliced with gussets. The gussets should be 2- by wood the same width at the joist and overlap by 6 inches on each side. These gussets should be held in place with 12 16d galvanized nails.

Handling Precautions for Pressure-Treated Wood

Disposal: Dispose of treated wood by ordinary trash collection. Treated wood should not be burned in open fires, stoves, fireplaces, or residential boilers because toxic chemicals may be produced as part of the smoke and ashes. Treated wood from commercial or industrial use (e.g construction sites) must be disposed of in accordance with state and Federal regulations, which may include burning only in commercial or industrial incinerators or boilers. Always refer to information on fastener packaging for use with pressure treated lumber.

Operating Conditions: Avoid frequent or prolonged inhalation of sawdust from treated wood. When sawing, sanding and machining treated wood, wear a dust mask. Whenever possible, these operations should be performed outdoors to avoid indoor accumulations of airborne sawdust from treated wood. (Lowe's in-store saws are equipped with a vacuum to minimize airborne sawdust).

Protection: When power-sawing and machining, wear goggles to protect eyes from flying particles.

Clean Thoroughly: Wear gloves when working with the wood. After working with the wood, and before eating, drinking, toileting, and use of tobacco products, wash exposed areas thoroughly.

Wash Separately: Because preservatives or sawdust may accumulate on clothes, they should be laundered before reuse. Wash work clothes separately from other household clothing.

For Additional Information: www.epa.gov - www.healthybuilding.net - www.ccasafetyinfo.com
www.treatedwood.com - Call: (800)282-0600 or (800)356-AWPI